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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,293	10/09/2003	Eric Teller	Auto-Journal-US	9347

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EXAMINER	
RAJAN, KAI	

ART UNIT	PAPER NUMBER
3769	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/682,293	TELLER ET AL.	
	Examiner	Art Unit	
	Kai Rajan	3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7,9,11-15,21-26,31,33,35-39,45-95,97,99,120,123 and 139-170* is/are pending in the application.

4a) Of the above claim(s) *2,21,23,26,45-95,97,99,120,123 and 139-170* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7,9,11-15,22,24,25,31,33 and 35-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/27/2009, 1/18/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges the response filed November 30, 2009.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 7, 9, 11 – 13, 15, 22, 24, 25, 31, 33, 35 – 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mault U.S. Patent No. 6,571,200 B1, cited by Applicant, in view of Cherry et al. U.S. Patent No. 5,701,894 ("Cherry").

1. An apparatus for deriving a state parameter of an individual, comprising:

a processor;

a sensor for generating a first set of sensor output signals (Mault column 4 lines 35 – 39, figure 1 item 12 exertion detector such as heart rate collects physiological data)

an accelerometer for generating a second set of sensor output signals comprising data indicative of said individual's motion at least one physiological sensor and at least one other sensor for generating first and second sets of sensor output signals (Mault column 4 lines 31 – 35, figure 1 item 11 movement sensor includes accelerometer),

said sensor output signals being directed to an electronic communication link with said processor (Mault column 4 lines 65 – 67, column 5 lines 1 – 19 microprocessor receives data from exertion and body activity detectors);

wherein said processor derives data from at least one of said first and second sets of sensor output signals (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40 microprocessor uses body movement data to determine the body activity of the user, and retrieves stored caloric expenditure data corresponding to the body activity);

wherein said processor determines the context of said individual from at least one of the first set of sensor output signals, said second set of sensor output signals, and said derived data (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40 microprocessor uses body movement data to determine the body activity such as running or walking, which are contexts of the user); and

wherein said processor utilizes said context to predict the energy expenditure of said individual (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40, column 6 lines 3 – 46, see also figure 2 microprocessor uses determined body activity of the user to retrieve stored caloric expenditure data corresponding to the body activity, and calculate the total calories expended).

Mault discloses an exertion level sensor such as a heart rate sensor for collecting physiological data concerning the user's exertion level during exercise. Mault fails to disclose a GSR sensor. However Cherry a reference in an analogous art of physiological monitoring teaches using galvanic skin response sensors to collect data indicative of stress (Cherry column 17 lines 8 – 18). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the heart rate sensor of Mault with the GSR sensor of Cherry, since Cherry states that GSR measures stress levels resulting from increased sweat gland activity, which is a measurement of exertion during exercise.

7. An apparatus according to claim 1, wherein said context comprises at least one of a resting and an active state of said individual (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40 microprocessor uses body movement data to determine the body activity such as running or walking).

9. An apparatus according to claim 1, further comprising a heat flux sensor (Cherry figure 2 shows a temperature sensor, yet Cherry and Mault fail to explicitly state using a heat flux sensor. However, it would have been obvious to one of ordinary skill in the art of physiological monitoring to incorporate a heat flux sensor in a skin mounted device such as that of Mault, since heat flux is a common parameter measured to evaluate user health and physiological states).

11. An apparatus according to claim 1, said processor generating caloric consumption data for said individual the apparatus further comprising a display which identifies said caloric

expenditure data and said caloric consumption data (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

12. An apparatus according to claim 11, further comprising an input device in electronic communication with said processor, said caloric consumption data being determined from information collected by said input device from said individual relating to foods eaten by said individual (Mault column 4 lines 2 – 13 caloric intake input).

13. An apparatus according to claim 11, wherein said displayed information includes energy balance data (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

15. An apparatus according to claim 11, wherein said displayed information includes information relating to one or more goals of said individual, said goals relating to the monitoring and status of one or more of caloric consumption, caloric expenditure, energy balance and rate of weight loss or gain for said individual (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

22. An apparatus according to said sensors being included in said wearable sensor device (Mault column 2 lines 60 – 64 subject equipped with detectors).

24. An apparatus according to claim 1, said apparatus further comprising a wearable sensor device including said sensors which is mounted on said individual, said processor being included in a computing device located separately from said sensor device, each of said computing device and said sensor device having transmitting and receiving circuitry for generating and receiving electronic signals which include said electronic communication link (Mault column 6 lines 36 - 54 discloses transmitting data from the device to other processors).

Column 5 is rejected on substantially the same basis as claim 1.

Claim 31 is rejected on substantially the same basis as claim 7.

Claim 33 is rejected on substantially the same basis as claim 9.

Claim 35 is rejected on substantially the same basis as claim 11.

Claim 36 is rejected on substantially the same basis as claim 12.

Claim 37 is rejected on substantially the same basis as claim 13.

Claim 39 is rejected on substantially the same basis as claim 15.

Claims 14 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mault U.S. Patent No. 6,571,200 B1, cited by Applicant, in view of Cherry et al. U.S. Patent No. 5,701,894 ("Cherry") applied to claims 1, 11, 25, and 35 above, further in view of Karkanen U.S. Patent No. 5,839,901.

Regarding claims 14 and 38, Mault and Cherry disclose a system for monitoring physiological data and outputting information such as caloric balance and expenditure and trend data to promote weight loss. Mault and Cherry fail to disclose displaying information regarding rate of weight loss or gain. However Karkanen a reference in an analogous art of physiological monitoring and weight control discloses calculating and displaying weight change rates (Karkanen see at least figures 12 and 16 with respective figure descriptions in the specification). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the displayed trend and caloric expenditure data of Mault and Cherry with the weight change rate data of Karkanen, since both inventions improve weight loss and weight control, and the features of Karkanen optimize weight loss (Karkanen column 1 lines 6 – 23).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Thornton U.S. Patent No. 5,263,491;

Richardson et al. U.S. Patent No. 5,976,083, cited by Applicant; and

Nihtila U.S. Patent No. 6,817,979 B2.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit 3769

March 27, 2010